

June 1, 1915.

DRAWING

397

A careful search has been made this day for the original drawing or a photolithographic copy of the same, for the purpose of reproducing the said drawing to form a part of this book, but at this time nothing can be found from which a reproduction can be made.

Finis D. Morris,
Chief of Division E.

AWK.

UNITED STATES PATENT OFFICE.

JESSEE C. SMITH, OF PUTNAM COUNTY, ILLINOIS.

MACHINERY OF MILLS FOR THE MANUFACTURE OF GRAIN INTO MEAL AND FLOUR.

Specification forming part of Letters Patent No. 397, dated January 9, 1830; Reissued September 25, 1837.

To all whom it may concern:

Be it known that I, JESSEE C. SMITH, of Putnam county, State of Illinois, have invented a new and Improved Mode of Grinding, Holding, and Accommodating Mill-stones; I do hereby declare that the following is a full and exact description.

The nature of my invention consists in the peculiar construction of the husk or frame to be used for the purpose of accommodating and securing mill stones, for grinding grain into meal or flour, or any other business calculated to be done under the operation of grinding. The husk, or frame is made of iron, compact and firmly secured together by both. The mills are calculated to be transported with safety, all finished in a perfect and workmanlike manner, ready for grinding. They are to be put in motion, either by strap or cog gearing; whichever the purchaser may choose.

To enable others skilled in the art, to make and use my invention, I will proceed to describe its construction.

The letters A, A, A, A, are cast iron circles, constituting the top and bottom of the frame, one of which shows the stone resting in it, the other (the bottom one) shows the Bridge tree lying cross as it is used. (We sometimes make the bottom frame square instead of round, as is shown by the red lines.) B, B, B, the pillars, of which there are four, (more or less,) which separate the circles, and hold them firmly together by bolts passing through, and tightened by nuts. C, C, the top pillars, there are two of this kind, on which rests the top frame E, which holds the hopper and turns at M. D, D, the bridge tree. E, E, the top frame which holds the hopper and screw O. F, F, the adjusting screw to raise and lower the bridge tree by passing through a nut fixed near the end at F. G, G, the connecting piece, which connects the top frame E with the bridge tree D, and passing through the top circle at the hole at G. H, H, the rendering pulley, to tighten the band, to be placed and held in the frame at letter R, to be used on whichever side the most proper. I, I, I, the stones. J, J, J, the box for foot of the spindle. K, K, the pulley on the spindle, by which it is driven. L, L, the damsel, or pressure rod, which keeps the stone from rising and is held at the top by a screw O, passing through the frame E, the bottom

resting on the balance rim in the stone, shaking the shoe, &c., M, M, M, M, the gudgeons on which the frame E, and bridge tree D, turns. N, 3 pieces which are screwed to the top circle to hold the bed stone. O, the screw in the plate E, holding the damsel. P, the screw, holding the top end of the rod on which the adjusting screw is cut. Q, a nut in the bridge tree for the adjusting screw. R, the step for tightening pulley. S, S, nuts which screw the frame together. T, T, T, socket for the eye of the runner. U, U, follower for packing box. V, V, packing box. W, in Nos. 1 and 2, spur wheel and pinions. B, in No. 2, pillars to hold husk together.

The drawing representing the frame put together, with the spindle, damsel, and stones, is of a scale one third larger than the detached pieces. I do not confine the frame to any particular size, but vary as the purchaser may wish. No. 1, is an arrangement of four single mills, fastened together by both, with a view to give them all motion by one spur wheel operating in the center, by means of pinions on the spindles. No. 2, represents another casting calculated to contain five run of two feet stones, consisting of two circles, one for the top and the other for the bottom, separated and held by pillars at B, secured firmly together by both, as in the single mills, and arranged in every particular the same, as to bridge tree, adjusting screw frame for hopper, connecting piece, &c. It only differs by having five pair of two foot stones, contained in one circle, and geared by a spur wheel and pinion as in No. 1.

I so construct the husk, or frame, (made of wood or iron) that the distance from the foot of the spindle, to M, the gudgeon on the bridge tree, is the same as the distance from the screw O, in the frame at E, to M, its gudgeon. Likewise, the distance from the screw O to where the connecting rod unites with E, is the same as the distance from the foot of the spindle to the connecting rod in the bridgetree, thereby producing the effect, that when I turn my regulating screw, F, to elevate, or depress the bridgetree, that the foot of my spindle, and the screw O in the plate E, move the same distance, this enables me to fetch the screw O, to a bearing on the pressure rod, and hold my running stone on the point of the

spindle, and in adjusting the stone in grinding I adjust the bearing over it at O, without any change as to their relative positions, the balance rim being fastened by bolts
5 through the brush in the eye from the top.

What I claim as new and of my invention is—

1. Connecting the bridge tree with the top part of the frame E, or whatever may be
10 used as a substitute, in the manner here described, or any other manner embracing the

same principles and producing the same effect.

2. The mode or manner of depressing, as well as elevating the running stone, by the
15 application of the screw to the bridgetree in the manner here described or any other producing the same effect.

JESSEE C. SMITH.

Witnesses:

A. W. PREUSS,

I. HARRIS.

[FIRST PRINTED 1914.]